

AF

I hereby certify that this correspondence is being deposited with the United States Postal Service with postage prepaid as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date indicated below.

Signature of Person Mailing Paper or Fee

3-29-05

Date of Signature

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of:		)
RAMESH LHILA, et al.		) Examiner: Hai Vo )
for:	ACRYLIC FOAM-LIKE TAPE	) Group Art Unit: 1771 )
Serial No.:	09/898,969	) ) ) Atty. Docket No. 6001-44-1 )
Filed:	July 3, 2001	

Mail Stop Appeal Brief - Patents COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, VA 22313-1450

#### APPEAL BRIEF

Dear Sir:

In response to the Notice of Non-Compliant Appeal Brief mailed March 4, 2005 in the above-identified application, Appellants submit the following revised brief in accordance with 37 CFR  $\S$  41.37.

This appeal is taken from the Final Office Action mailed March 31, 2004 in the above-identified application.

# I. Real Party in Interest

The real party in interest with respect to the above-identified patent application is: Scapa Tapes North America, Inc. having a place of business at 111 Great Pond Drive, Windsor, CT 06095.

# II. Related Appeals and Interferences

Appellants and the undersigned attorney are not aware of any pending patent appeal or interference proceeding related to the above-referenced application.

#### III. Status of Claims

Claims 1-20 are pending in the application and stand rejected by the Examiner under 35 U.S.C. § 103(a). All rejected claims are presented to the Board for reconsideration.

## IV. Status of Amendments

An amendment after final was submitted September 30, 2004 wherein claims 1, 2, 4, 8-10, 12, 18, and 19 were amended. The Advisory Action dated October 15, 2004, indicates that the Examiner has entered the amendment of September 30, 2004.

## V. <u>Summary of Claimed Subject Matter</u>

The invention defined by independent claim 1 is directed to an acrylic pressure-sensitive adhesive tape comprising a layer of an acrylic backing, at least one layer of a pressure-sensitive adhesive disposed on at least one side of the layer of the acrylic backing, and a primer layer disposed between the layer of the acrylic backing and the layer of the pressure sensitive adhesive. (Application, paragraph 24.) Claim 1 also defines the composition of the acrylic backing and the primer layer.

# VI. Grounds of Rejection

Appellants request the Board to review the following grounds for rejection asserted by the Examiner:

Claim 1 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 5,612,136 to Everaerts et al. (hereinafter "Everaerts") in view of U.S. Patent No. 5,503,927 to Ragland et al. (hereinafter "Ragland") as evidenced by U.S. Patent No. 3,707,521 to De Santis (hereinafter "De Santis").

## VII. Argument

1.

1. The Examiner's rejection of claims 1-8, 11-14, and 18 under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 5,612,136 to Everaerts et al. (hereinafter "Everaerts") in view of U.S. Patent No. 5,503,927 to Ragland et al. (hereinafter "Ragland") as evidenced by U.S. Patent No. 3,707,521 to De Santis (hereinafter "De Santis") is improper for at least the following reasons:

For a rejection under 35 U.S.C. §103(a) to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. The Examiner can satisfy this burden only by showing some objective teaching in the cited documents of record that would lead an individual of ordinary skill in the art to combine the relevant teachings of the references. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). This, the Examiner has not done.

As noted above, the invention as defined by claim 1 is directed to an acrylic pressure-sensitive adhesive tape comprising a layer of an acrylic backing, at least one layer of a pressure-sensitive adhesive disposed on at least one side of the layer of the acrylic backing, and a primer layer disposed between the layer of the acrylic backing and the layer of the pressure sensitive adhesive.

In contrast, Everaerts is directed to a pressure sensitive adhesive having improved adhesion to acid-rain resistant automotive paints. The adhesive comprises a cross-linked copolymer comprising at least one monomer selected from the group consisting of monofunctional unsaturated meth(acrylate) esters, a nitrogen-containing basic monomer that is copolymerizable with the ester(s), an optional copolymerizable acidic monomer, and a cross-linking agent.

Ragland is directed to polymer-pressure sensitive adhesive combinations, particularly in the form of laminates, and methods of producing such combinations. In the combinations, the bond strength of the pressure sensitive adhesive to the polymer layer is improved by priming the polymer surface with a urethane primer before the application of the adhesive to the polymer surface. The polymer surface may be

activated using a silicon-containing treating agent (if necessary) to accept the urethane primer. In one aspect, the laminate comprises a polymeric layer, a coating of urethane on the surface of the polymeric layer, and a pressure sensitive adhesive applied to the coated surface. The polymeric layer may be elastomeric (e.g., silicone foam, EPDM, PVC, perfluoroethylene, vinylidinefluoride, or the like).

De Santis is directed to a polyurethane sealant-primer system having an isocyanate-reactive surface primer composition and a moisture-curable polyurethane sealant composition. The isocyanate-reactive surface primer composition comprises an aliphatic silane; carbon black; one of chlorinated rubber, PVC, polyacrylate resins, and polyester resins; a condensation product of toluene diisocyanate and hexamethylene diisocyanate; a catalyst; and an organic solvent.

As stated by the Examiner, Everaerts does not disclose a composition of a primer layer. (Office Action mailed March 31, 2004, page 3.)

The Examiner has not identified any teaching, suggestion, or motivation to combine Everaerts with Ragland and De Santis to arrive at the invention of claim 1. The work of Everaerts is derived in response to a need for providing adhesion to acid-rain resistant automobile coatings having acidic characteristics. (Everaerts, column 3, lines 36-40.) More specifically, Everaerts discloses the use of an adhesive to mount a device to a surface. The invention of Ragland, on the other hand, is derived in response to the alleged long-existing problem of inadequate bond strength that results from conventional lamination of a layer of a pressure sensitive adhesive to a silicone foam sheet. (Ragland, column 3, lines 27-31.) Accordingly, Ragland is directed to maintaining the integrity of the pressure sensitive adhesive (in tape form) itself. Thus, Ragland is directed to the manufacture of tape and does not discuss the use of the tape to bind two objects.

De Santis is relied on by the Examiner to teach that the primer of Ragland may be a silane-modified elastomer solution. The use of an adhesive to mount a device to a surface is not indicative of the structural integrity of a tape, and one of skill in the art would not look to combining an adhesive for adhering objects to surfaces having acidic

characteristics with devices having adhesives directed to improving bond strength within the device.

Absent any teaching, suggestion, or motivation to combine the cited documents, such combinations are made by hindsight and are impermissible. For at least the above-identified reasons, the combination of Everaerts with Ragland as evidenced by De Santis does not teach, suggest, or motivate one of skill in the art to arrive at the invention recited in claim 1. Thus, the combination of Everaerts with Ragland is not proper. Because the combination is not proper and could have only come from hindsight reasoning, the Examiner has failed to establish a *prima facie* case of obviousness. Therefore, Appellants respectfully request reconsideration and withdrawal of the Section 103(a) rejection of independent claim 1.

Claims 2-20 depend either directly or indirectly from claim 1 and also recite additional limitations. Since claim 1 is not obvious over the combination of Everaerts and Ragland as evidenced by De Santis for at least the above-identified reasons, dependent claims 2-20 are also not obvious over the primary combination of Everaterts, Ragland and De Santis. Therefore, the rejection of claims 2-20 under 35 U.S.C. § 103(a) should also be withdrawn.

### **Conclusion**

For the reasons discussed above, this application is in a condition for allowance and thus reversal of the outstanding rejections and allowance of the application is appropriate.

Applicant believes that no additional fee is due in connection with this filing. Please charge any deficiency in fee due or any other fee required for this application to Deposit Account No. 13-0235.

Respectfully submitted,

Anthon E. Dianno

Arthur F. Dionne, Esq. Registration No. 23,093 Attorney for Applicant(s)

McCORMICK, PAULDING & HUBER LLP CityPlace II, 185 Asylum Street Hartford, CT 06103-4102

Tel: (860) 549-5290

Fax: (413) 733-4543

# VIII. Claims Appendix

# **Listing of Current Claims:**

- 1. An acrylic pressure-sensitive adhesive tape comprising:
  - (a) a layer of an acrylic backing comprising
  - (i) from about 88% by weight to about 92% by weight of an acrylic polymer comprising:

from about 35% by weight to about 45% by weight of a first alkyl acrylate monomer having alkyl groups which contain from 4 to 12 carbon atoms,

from about 30% by weight to about 40% by weight of a second alkyl acrylate monomer having alkyl groups which contain from 4 to 12 carbon atoms, wherein said second alkyl acrylate monomer is independent from said first alkyl acrylate monomer,

from about 6% by weight to about 10% by weight of a first monoethylenically unsaturated polar copolymerizable monomer, and

from about 1% by weight to about 2% by weight of a second monoethylenically unsaturated polar copolymerizable monomer, wherein said second monoethylenically unsaturated polar copolymerizable monomer is independent from said first monoethylenically unsaturated polar copolymerizable monomer; and

- (ii) from about 8% by weight to about 12% by weight of hollow glass microspheres dispersed evenly in said polymer;
- (b) at least one layer of a pressure-sensitive adhesive disposed on at least one side of said layer of said acrylic backing; and
- (c) a primer layer disposed between said layer of said acrylic backing and said layer of said pressure sensitive adhesive, said primer layer comprising a primer selected from the group of primers consisting of polyamide solution, polyamide emulsion, nitrile rubber based solution, nitrile rubber based emulsion, natural rubber based solution, natural rubber based emulsion, ethylene-propylene copolymer rubber based solution, ethylene-propylene copolymer rubber based emulsion, ethylene-propylene-diene monomer terpolymer rubber based solution, ethylene-propylene-diene monomer terpolymer rubber based emulsion, poly(ethylene-co-vinyl acetate) solution, poly(ethylene-co-vinyl) acetate emulsion, poly(ethylene-co-vinyl acetate and

alcohol) solution, poly(ethylene-co-vinyl acetate and alcohol) emulsion, silane modified rubber solutions, and silane modified elastomer solutions.

- 2. The acrylic pressure-sensitive adhesive tape according to claim 1, wherein the acrylic polymer includes from about 0.33% by weight to about 0.5% by weight of initiator.
- 3. The acrylic pressure-sensitive adhesive tape according to claim 2, wherein the initiator comprises at least one photoinitiator.
- 4. The acrylic pressure-sensitive adhesive tape according to claim 1, wherein the acrylic polymer includes from about 0.05% by weight to about 0.07% by weight of a crosslinker/chain extender.
- 5. The acrylic pressure-sensitive adhesive tape according to claim 4, wherein the crosslinker/chain extender is a multifunctional acrylate.
- 6. The acrylic pressure-sensitive adhesive tape according to claim 4, wherein the crosslinker/chain extender is a multi-ethylenically unsaturated copolymerizable monomer containing at least two carbon-carbon double bonds.
- 7. The acrylic pressure-sensitive adhesive tape according to claim 4, wherein: the crosslinker/chain extender is taken from the group consisting of ethylene glycol diacrylate, triethylene glycol diacrylate, 1,4-butanediol diacrylate, 1,6-hexanediol diacrylate, trimethylolpropane triacrylate, pentaerythritol triacrylate, tetraethylene glycol diacrylate, methacrylates, and combinations thereof.
- 8. The acrylic pressure-sensitive adhesive tape according to claim 1, wherein the acrylic polymer includes from about 1% by weight to about 2% by weight of a filler.

- 9. The acrylic pressure-sensitive adhesive tape according to claim 8, wherein said filler is a fumed silica.
- 10. The acrylic pressure-sensitive adhesive tape according to claim 8, wherein said filler is a surface modified silica.
- 11. The acrylic pressure-sensitive adhesive tape according to claim 1, wherein: the first alkyl acrylate monomer is isooctylacrylate, the second alkyl acrylate monomer is 2-ethylhexyl acrylate, the first monoethylenically unsaturated polar copolymerizable monomer is acrylic acid,

the second monoethylenically unsaturated polar copolymerizable monomer is acrylamide, and

the hollow glass microspheres are borosilicate glass.

12. The acrylic pressure-sensitive adhesive tape according to claim 11, wherein the acrylic polymer further comprises:

from about 0.3% by weight to about 0.5% by weight of initiator, from about 1% by weight to about 2% by weight of a filler, and from about 0.05% by weight to about 0.07% by weight of a crosslinker/chain extender.

- 13. The acrylic pressure-sensitive adhesive tape according to claim 12, wherein the initiator comprises at least one photoinitiator.
- 14. The acrylic pressure-sensitive adhesive tape according to claim 13, wherein the photoinitiator is benzoin ethyl ether.
- 15. The acrylic pressure-sensitive adhesive tape according to claim 11, wherein the filler is fumed silica.
- 16. The acrylic pressure-sensitive adhesive tape according to claim 11, wherein the filler is a surfaced modified silica.

- 17. The acrylic pressure-sensitive adhesive tape according to claim 11, wherein the crosslinker/chain extender is 1,4 butanediol diacrylate.
- 18. The acrylic pressure-sensitive adhesive tape according to claim 11, wherein the acrylic backing comprises:

from about 40% by weight to about 41% by weight isooctylacrylate; from about 36% by weight to about 37% by weight 2-ethylhexyl acrylate; from about 8% by weight to about 9% by weight acrylic acid; from about 1% by weight to about 2% by weight acrylamide; and from about 10% by weight to about 11% by weight borosilicate glass.

19. The acrylic pressure-sensitive adhesive tape according to claim 18, wherein the acrylic backing further comprises:

from about 0.35% by weight to about 0.45% by weight benzoin ethyl ether; from about 1% by weight to about 2% by weight fumed silica; and from about 0.055% by weight to about 0.065% by weight 1,4 butanediol diacrylate.

20. The acrylic pressure-sensitive adhesive tape according to claim 1, wherein the backing further comprises:

a sufficient amount of colorant to depart color to the adhesive tape.

21-42. (Cancelled)